

peristome at the opposite side from that on which it is observable in *M. altum*, Sow. Dr. Pfeiffer's supposed specimen of *M. scitilabre* is from Borneo, and is, unquestionably, *M. Anostoma*, showing a trace of the channel on the inside of the columellar lip, and none on the opposite side.

Pfeiffer's *Leptopoma Burmanum*, collected by Dr. Theodore Philippi at Mergui, is not to be recognized in the collection. A bleached and worn shell, without an operculum, and intermediate in size between that shell and *Cyclophorus expansus*, is marked from Phie Than, and is probably only a variety of the species last named, with a more acute keel and a less expanded peristome. *L. Burmanum* was described from an immature specimen, and will probably present a different aspect from the figure given in Chemnitz when found in its full development.

Cheltenham, 25th January, 1856.

Since the conclusion of the above paper, I have received, among some shells collected in the Burmese territory by Mr. Oldham, a third species of *Hydrocena*, intermediate between *H. sarrita* and *H. Illex*, but larger than either. It was found at the Mya-leit Hill, near Ava, during the stay of the late embassy at that capital.

XVIII.—*Descriptions of three newly discovered species of Araneidea.* By JOHN BLACKWALL, F.L.S.

Tribe Octonoculina.

Family LINYPHIIDÆ.

GENUS NERIËNE, Blackw.

Neriëne cornigera.

Length of the male $\frac{1}{12}$ th of an inch; length of the cephalo-thorax $\frac{1}{4}$; breadth $\frac{1}{8}$; breadth of the abdomen $\frac{1}{8}$; length of an anterior leg $\frac{1}{8}$; length of a leg of the third pair $\frac{1}{10}$.

The cephalo-thorax is oval, convex, glossy, slightly elevated before, where the eyes are situated, and has an indentation in the medial line: the falces are conical, divergent at the extremity, armed with teeth on the inner surface, and somewhat inclined towards the sternum, which is broad, convex, glossy, and heart-shaped: the maxillæ are inclined towards the lip, which is semicircular and prominent at the apex: the legs are slender and slightly hairy; the first and fourth pairs are the longest and equal in length, and the third pair is the shortest;

each tarsus is terminated by three claws; the two superior ones are curved, and the inferior one is inflected near its base. These parts are of a brownish-yellow colour, the sternum, base of the lip, and tibiæ of the first and second pairs of legs being the brownest. The eyes are seated on black spots; the four intermediate ones form a trapezoid, the anterior pair, which constitutes its shortest side, being the smallest of the eight; those of each lateral pair are placed obliquely on a small tubercle and are almost in contact. The palpi have a brownish-yellow hue, the digital joint being the brownest; the cubital and radial joints are short: the latter, which is the larger, is prominent at its extremity, in front, and has several long bristles at its base; the digital joint is oval, with a long, conical, hornlike process at its base, whose pointed termination extends to the extremity of the cubital joint, and is provided with one or two long bristles; it is convex and hairy externally, concave within, comprising the palpal organs, which are highly developed, prominent, complicated in structure, with a small, black, curved, pointed spine at the base, on the outer side, and are of a yellowish-brown colour. The abdomen is oviform, convex above, and projects a little over the base of the cephalo-thorax; it is thinly clothed with hairs, and of a dark, dull brown hue, that of the spinners being pale yellowish-brown.

This remarkable spider was discovered among moss growing under trees in a wood on the northern slope of Gallt y Rhyg, in the autumn of 1854.

Neriëne montana.

Length of the male $\frac{1}{10}$ th of an inch; length of the cephalo-thorax $\frac{1}{20}$; breadth $\frac{1}{24}$; breadth of the abdomen $\frac{1}{20}$; length of a posterior leg $\frac{1}{8}$; length of a leg of the third pair $\frac{1}{8}$.

The eyes are seated on black spots, the anterior pair of the four intermediate ones forming the trapezoid, which are near to each other, being the smallest and darkest of the eight. The cephalo-thorax is oval, convex, glossy, with slight furrows on the sides, which converge towards an indentation in the medial line: the falces are powerful, conical, vertical, and armed with a few teeth on the inner surface: the maxillæ are enlarged at the extremity, and inclined towards the lip, which is semicircular and prominent at the apex: the sternum is broad, heart-shaped, convex and glossy: the legs, which are moderately long, are provided with hairs and a few fine spines; the fourth pair is slightly longer than the first, which surpasses the second, and the third pair is the shortest; each tarsus is terminated by three claws; the two superior ones are curved and pectinated, and the inferior one is inflected near its base. These parts are of a pale yellow-

brown colour, the falces, maxillæ and lip having a faint tinge of red. The palpi resemble the legs in colour; the cubital and radial joints are short, the latter, which is the stronger, being somewhat produced at its extremity, in front; the digital joint is oval, with a small, conical process at its base, and a lobe near the middle of the outer side; it is convex and hairy externally, concave within, comprising the palpal organs, which are highly developed, complicated in structure, with a prominent, curved, scalelike process at the base, on the outer side, and are of a brownish-red colour. The abdomen is oviform, convex above, projecting over the base of the cephalo-thorax; it is thinly clothed with hairs, glossy, and of a dark yellowish-brown colour, the branchial opercula and spinners being much the palest.

This spider, which was found on Ingleborough, a mountain in Yorkshire, in September 1855, was received from Mr. R. H. Meade.

Genus WALCKENAËRA, Blackw.

Walckenaëra vafa.

Length of the male $\frac{1}{10}$ th of an inch; length of the cephalo-thorax $\frac{1}{16}$; breadth $\frac{1}{22}$; breadth of the abdomen $\frac{1}{22}$; length of a posterior leg $\frac{5}{24}$; length of a leg of the third pair $\frac{3}{20}$.

The cephalo-thorax is oval, convex, glossy, with a strong, vertical prominence before, which is somewhat compressed on the sides and surmounted by a few hairs: the falces are small, conical, armed with teeth on the inner surface, and inclined towards the sternum, which is broad, glossy, and heart-shaped: the maxillæ are powerful and curved towards the lip, which is semicircular and prominent at the apex. These parts are of a brownish-red colour, with the exception of the anterior prominence of the cephalo-thorax, which has a dark brown hue tinged with red. The legs are long, slender, hairy, and have a bright yellowish-red tint; the fourth pair is the longest, then the first, and the third pair is the shortest; each tarsus is terminated by three claws; the two superior ones are curved and pectinated, and the inferior one is inflected near its base. The palpi resemble the legs in colour, but the radial and digital joints are tinged with brown; the cubital joint is clavate; the radial joint projects two apophyses from its extremity; one, on the inner side, is large, pointed, curved outwards in front of the digital joint, and has, near its base, a minute process on the convex side, and a large obtuse one on the opposite side; the other apophysis, which is smaller and obtuse, is situated underneath; the digital joint is somewhat oval, convex and hairy externally, concave within, comprising the palpal organs; these organs are highly developed, complicated in structure, with two long, filiform, contiguous black spines enveloped in membrane,

originating near the middle and curved in a circular form on the outer side; a shorter one, also originating near the middle and enveloped in membrane, is curved obliquely downwards, and their prevailing colour is brownish-red. The convex sides of the digital joints are directed towards each other. The eyes are seated on the anterior part of the cephalo-thorax, two on the summit of the vertical prominence, and the other six at its base, in front, each lateral pair being placed obliquely. The abdomen is oviform, convex above, and projects over the base of the cephalo-thorax; it is sparingly clothed with hairs, glossy, and of a brownish-black colour, that of the branchial opercula being pale yellowish-white.

Adult males of this species were discovered under stones in the woods about Hendre House, near Llanrwst, in October 1855.

XIX.—On some species of *Epilobium*.

By CHARLES C. BABINGTON, M.A., F.R.S. &c.*

HAVING been led to examine the British species of *Epilobium*, and arrived at the opinion that some of them have not received as much attention as they deserve, and have therefore been misunderstood, it seems desirable to publish the results. My object in so doing is to direct attention to the plants—not to place before botanists a conclusion satisfactorily attained. There remains much to be done before we can be said well to understand these plants. Those upon which it is proposed to treat have been included under the names of *E. tetragonum* and *E. alpinum*.

Before proceeding to the discussion of the species, it will be well to clear the way by pointing out the characters upon which it is believed that we may depend. This will entail a slight sketch of the arrangement of our *Epilobia*. Leaving out of consideration the group called *Lysimachion* by authors (although there is a newly-discovered species of that section to be noticed before ending this paper), we shall find that, taken in its general sense, the form assumed by the stigmas will separate our plants into two groups: (1) those which have that organ formed of four spreading divisions so as to be cross-like, namely *E. hirsutum*, *E. parviflorum*, *E. montanum*, and *E. lanceolatum*; and (2) the rest of our species, whose stigmas are so placed as to form a club, either by having the four parts soldered together or by their being adpressed to each other. In the latter case, that is, when the stigmas are adpressed, they may sometimes be observed to separate slightly, but never, as I believe, to become cross-like. It is only when taken generally, that the stigma can be safely used

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